

CBP Enterprise Services

Office of Facilities and Asset Management

Overview of CBP Fence

November 18, 2016



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Map of Existing Fence

(b) (7) (E)

Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.



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A Foundation on Which to Build Fence

- CBP was tasked with building 700 miles of “two layer” fencing on the southwest border which was later changed to meet USBP operational requirements of 654 miles of primary fence.
- This was tasked to CBP in July 2007, with 600 miles completed by January 20, 2009.
- 654 miles of primary fence have been completed to date, with the majority of mileage completed between 2008 and 2009.



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Map of Proposed Fence

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Map of Existing & Proposed Fence

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Summary of Notional Requirements & Costs

Requirement Type	New Miles	Acquisition/Initial Costs ROM (-50/+100) Cost	Annual Tail Costs ROM (-50/+100)
New Primary PF	(b) (7)(E), (b) (5)		
New VF			
Replacement Primary PF			
New Secondary PF			
New Roads			
Repairs to Existing Roads			

The mileage shown above is notional, resulting from an initial data gathering exercise conducted by USBP. Final requirements and solutions may vary significantly from above as the data are validated, feasibility determined and additional elements (e.g. technology) of a total border security & situational awareness strategy are considered.



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Quickest Wins

(b) (5)



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Approach to Fence Construction

- **Cost:**

- Primary PF: (b)(3) per mile
 - Average of (b)(3)/mile for real estate and environmental planning, construction and construction oversight.
 - (b)(3)/mile for mileage (b)(5)
 - (b)(3)/mile for mileage (b)(5)
 - (b)(3)/mile for environmental mitigation
 - (b)(3)/mile for real estate acquisition
 - (b)(3)/mile for staffing increases required to support the program
- Secondary PF: (b)(3) per mile
 - Average of (b)(3)/mile for real estate and environmental planning, construction and construction oversight – also include (b)(3) mile for road between layers of fence
 - (b)(3)K/mile for environmental mitigation
 - (b)(3)/mile for real estate acquisition
 - (b)(3)K/mile for staffing increases required to support the program



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Approach to Fence Construction

- **Cost (continued)**

- VF: (b)(3) per mile

- Average of (b)(3)/mile for real estate and environmental planning, construction and construction oversight.
 - (b)(3)/mile for environmental mitigation
 - (b)(3)/mile for real estate acquisition
 - (b)(3)/mile for staffing increases required to support the program

- **Government Furnished Material (GFM) and Supply Chain:**

- (b) (5)

- **Procurement**

(b) (5)



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Approach to Complete Fence Construction

- **Other Considerations**

(b) (5)

- Program office staffing (quantity and skill mix)
- Statutory limitations
- Audit implications



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BACKUP



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Border Fence Overview

- To date, U.S. Customs and Border Protection (CBP) completed **654 miles of primary pedestrian and vehicle fence**.
 - Border Fence provides persistent impedence to illegal cross-border activity, which offers Border Patrol agents more time to respond to and resolve threats.
 - CBP has completed three main fence programs since the enactment of the Secure Fence Act in 2006: Pedestrian Fence (PF) 70, PF 225, and Vehicle Fence (VF) 300. Any fence constructed prior to these programs is considered “legacy.”*
 - Tactical Infrastructure (TI) also includes gates; roads, bridges and boat ramps; drainage structures and grates; lighting and electrical systems; and vegetation and debris removal.

Sector	Pedestrian Fence				Vehicle Fence
	Primary	Secondary	Tertiary	TOTAL PF	TOTAL VF
Big Bend (BBT)	(b) (7)(E)				
Del Rio (DRT)					
El Centro (ELC)					
El Paso (EPT)					
Laredo (LRT)					
Rio Grande Valley (RGV)					
San Diego (SDC)					
Tucson (TCA)					
Yuma (YUM)					
TOTAL					



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*The term “legacy” is also used to define older fence designs including landing mat. These legacy designs are being assessed for replacement.
Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.
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Maps

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Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.

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Maps – Current Fence, California

(b) (7) (E)

Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.



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Maps – Proposed Fence, California

Layered approach maps

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Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.

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Maps – Current Fence, Arizona

(b) (7)(E)

Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.



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Maps – Proposed Fence, Arizona

Layered approach maps

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Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.

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Maps – Current Fence, New Mexico

(b) (7)(E)

Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.



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Maps – Proposed Fence, New Mexico

Layered approach maps

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Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.

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Maps – Current Fence, Texas (N)

(b) (7)(E)

Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.



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Maps – Proposed Fence, Texas (N)

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Maps – Current Fence, Texas (N Central)

(b) (7) (E)

Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.



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Maps – Current Fence, Texas (S Central)

(b) (7)(E)

Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.



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Maps – Current Fence, Texas (S)

(b) (7)(E)

Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.



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Maps – Proposed Fence, Texas (N, N Central, South Central and South)

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Please note that numbers may not add up due to rounding. Fence mileage is tracked to the thousandth decimal place.

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Maps – Proposed Fence, Northern Border

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Proposed New Fencing

(b) (5)

(b) (5)



(b) (5)

(b) (5)



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All Fence Requirements – Primary, PF & VF

Sector	Existing VF	New Miles VF	ROM (-50/+100) Acquisition Cost VF	Existing Primary PF	New Miles Primary PF	ROM (-50/+100) Acquisition Cost Primary PF
SDC	(b) (7)(E), (b)(3)					
ELC						
YUM						
TCA						
EPT						
BBT						
DRT						
LRT						
RGV						
BLW						
SPW						
HVM						
GFN						
DTM						
BUN						
SWB						
HLT						



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All Fence Requirements – Replacement PF & Secondary PF

Sector	Replacement Miles PF	ROM (-50/+100) Acquisition Cost Replacement PF	Existing Secondary PF	New Miles Secondary PF	ROM (-50/+100) Acquisition Cost Secondary PF	Existing Tertiary PF
SDC	(b) (7)(E), (b)(3)					
ELC						
YUM						
TCA						
EPT						
BBT						
DRT						
LRT						
RGV						
BLW						
SPW						
HVM						
GFN						
DTM						
BUN						
SWB						
HLT						



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Border Fence Photos – Legacy for Replacement

Pedestrian Fence – Bollard & Legacy



Pedestrian Fence – Legacy



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Border Fence Photos – VF Designs

Vehicle Fence – Normandy



Vehicle Fence – Post/Rail



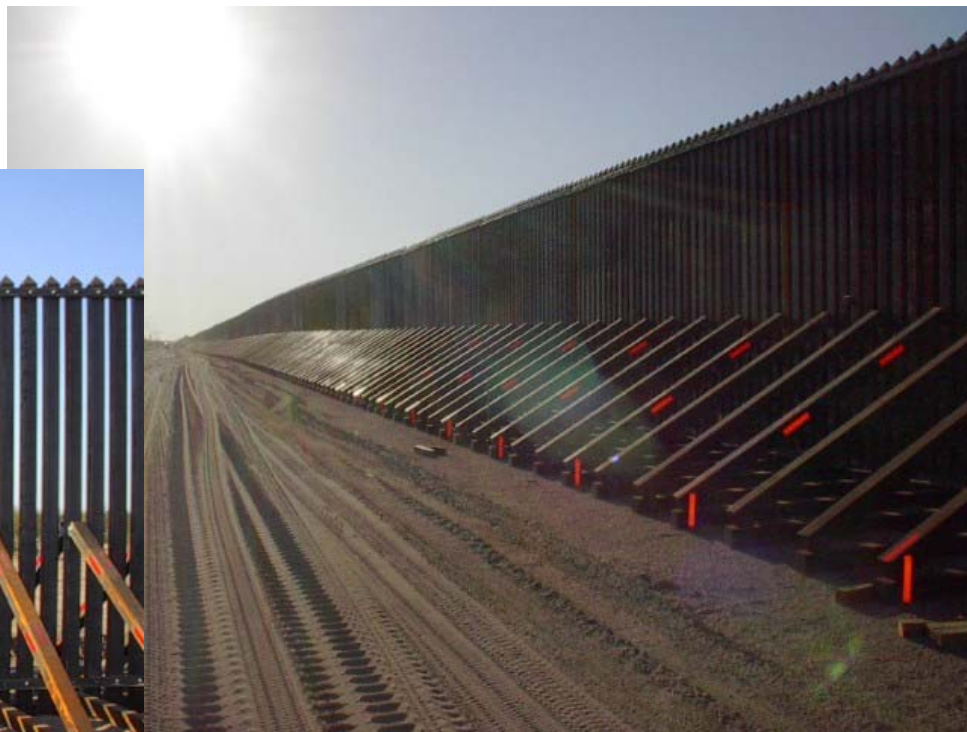
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Border Fence Photos – Floating Fence Design

Pedestrian Fence – Floating Fence – El Centro Sector



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Border Fence Photos – Preferred PF Design

Pedestrian Fence – PV-1 Bollard Tucson Sector



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Border Fence Photos – Preferred PF Design

Pedestrian Fence – PV-1 Bollard Tucson Sector



Pedestrian Fence – PV-1 Bollard Yuma Sector



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Border Fence Photos – Levee Wall

Pedestrian “Fleevie” – Fence on Levee



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Approach to Fence Construction

- **Costs to Construct Primary PF (same for fence replacement costs)**

- On average, cost to construct primary pedestrian or replace primary pedestrian fence is approximately (b)(3) per mile.
- Estimate is a rough order of magnitude (-50/+100) and includes project planning and oversight, environmental planning and compliance, environmental mitigation, real estate planning and acquisition, staffing and human capital requirements, design and construction.

- **Cost to Construct Secondary PF**

- On average, cost to construct secondary PF is approximately (b)(3) per mile.
- Estimate is a rough order of magnitude (-50/+100) and includes project planning and oversight, environmental planning and compliance, environmental mitigation, real estate planning and acquisition, staffing and human capital requirements, design and construction.
- Due to the high likelihood that secondary fence will be placed in commercial or residential areas, real estate acquisition costs for secondary fencing are very high (estimated at approx. (b)(3)/mile), driving up the overall cost per mile estimate.

- **Costs to Construct VF**

- On average, cost to construct vehicle fence fence is approximately (b)(3) per mile.
- Estimate is a rough order of magnitude (-50/+100) and includes project planning and oversight, environmental planning and compliance, environmental mitigation, real estate planning and acquisition, staffing and human capital requirements, design and construction.



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Approach to Fence Construction

- Legal Considerations

(b) (5)



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Approach to Complete Fence Construction

- **Government Furnished Material (GFM) and Supply Chain:**

- The Buy American Act restricts the purchase of supplies that are not domestic products requiring 50% of the components to be produced in the U.S.

- Exceptions include non-availability and unreasonable costs. (b) (5)

(b) (5)

- **Procurement**

(b) (5)



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Approach to Complete Fence Construction

- **Other Considerations:**

- Additional staffing will be required in all program areas to meet the demands of fence construction while still maintaining current programs
 - Additional workload specifically in the areas of real estate, environmental, engineering, financial management, communications and reporting, project management, and support services will require additional staff within the program office and its parent organizations.
 - Office of Chief Counsel, Procurement, and support from the Department of Justice will also need to be considered to ensure bandwidth to meet these requirements.
- To meet additional staffing requirements, staff support contracts will need to be put in place and an expedited hiring process for hiring federal employees needs to be prioritized and completed as soon as possible.
- Substantial condemnation actions will likely be required across the Northern & Southwest Borders, especially for secondary fence
- Locality dynamics (ex. AZ vs. TX)
- Statutory limitations
 - Prohibited from maintaining operationally critical county roads. Requires legislative change
- Do not have documented fence requirements in many locations (current and former IG & GAO Audits)
 - Majority of fence requirements up to this point were for legacy fence replacement



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Border Fence Background

- Section 102(b) of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), as amended, authorizes the Department of Homeland Security (DHS) to construct border infrastructure, including fencing, in locations where such infrastructure would be most practical and effective in deterring illegal entry on the southwest border.
- The purpose of border fence construction is to provide persistent impedance to illegal cross-border activity, which offers Border Patrol agents more time to respond to and resolve threats. Although it is possible to create a breach, or to climb over the fence, the delay in crossing provides agents with additional time to react, thereby increasing the probability of a successful law enforcement resolution.
- To date, CBP completed 654 miles of primary pedestrian and vehicle fencing along the southwest border: approximately 354 miles of pedestrian fence and 300 miles of vehicle fence at the cost of approximately \$2.3 billion.
- It is important to note that tactical infrastructure (TI) also includes roads; gates and bridges; drainage structures and grates; lighting and electrical systems; vegetation and debris removal; and tower real property, construction and maintenance.



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Road Requirements

Sector	Existing All Weather Roads	New Road Miles	ROM (-50/+100) Acquisition Cost New Roads	Road Repair Miles*	ROM (-50/+100) Repair Cost New Roads
SDC	(b) (7)(E), (b)(3)				
ELC					
YUM					
TCA					
EPT					
BBT					
DRT					
LRT					
RGV					
BLW					
SPW					
HVM					
GFN					
DTM					
BUN					
SWB					
HLT					



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Road Considerations

- CBP manages an inventory of over (b) (7)(E) miles of roads identified by the U.S. Border Patrol for maintenance.
 - Roads are utilized for operational requirements include patrol and drag roads. Additionally, these roads provide access to tactical infrastructure including fence and boat ramps.
- CBP is currently in the process of obtaining both real estate access and environmental clearance to ensure maintenance can be conducted on these roads.
 - As of November 2016, (b) (7)(E) miles are fully cleared for maintenance and the remaining (b) (7)(E) miles are in the process of acquiring both real estate access and environmental clearance. CBP is in the process of acquiring real estate access and completing environmental clearances on the remaining (b) (7)(E) miles.
- The average cost to construct new roads is currently estimated at (b)(3)
 - Estimate is a rough order of magnitude (-50/+100) and includes project planning and oversight, environmental planning and compliance, environmental mitigation, real estate planning and acquisition, staffing and human capital requirements, design and construction.
- The recurring average cost to maintain existing roads is (b)(3) per mile, per year.
 - Estimates for "recurring costs" are rough order of magnitude (-50/+100) and reflect average maintenance costs per mile of road plus environmental compliance and staffing and human capital requirements.



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Other Critical TI Requirements

- **Carrizo Cane Removal**

- Method: Mechanical with herbicide
- Required in:
 - All Laredo
 - All Del Rio
 - Some RGV
 - Some El Centro

- **Boat Ramps**

- RGV – (b) (7)(E)
- LRT – TBD
- DRT – TBD



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Current Tactical Infrastructure Unfunded Requirements

- Currently identified requirements from USBP that have been documented by FM&E are listed below. USBP is currently developing their full requirements list to provide to CBP leadership.

(b) (5)



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